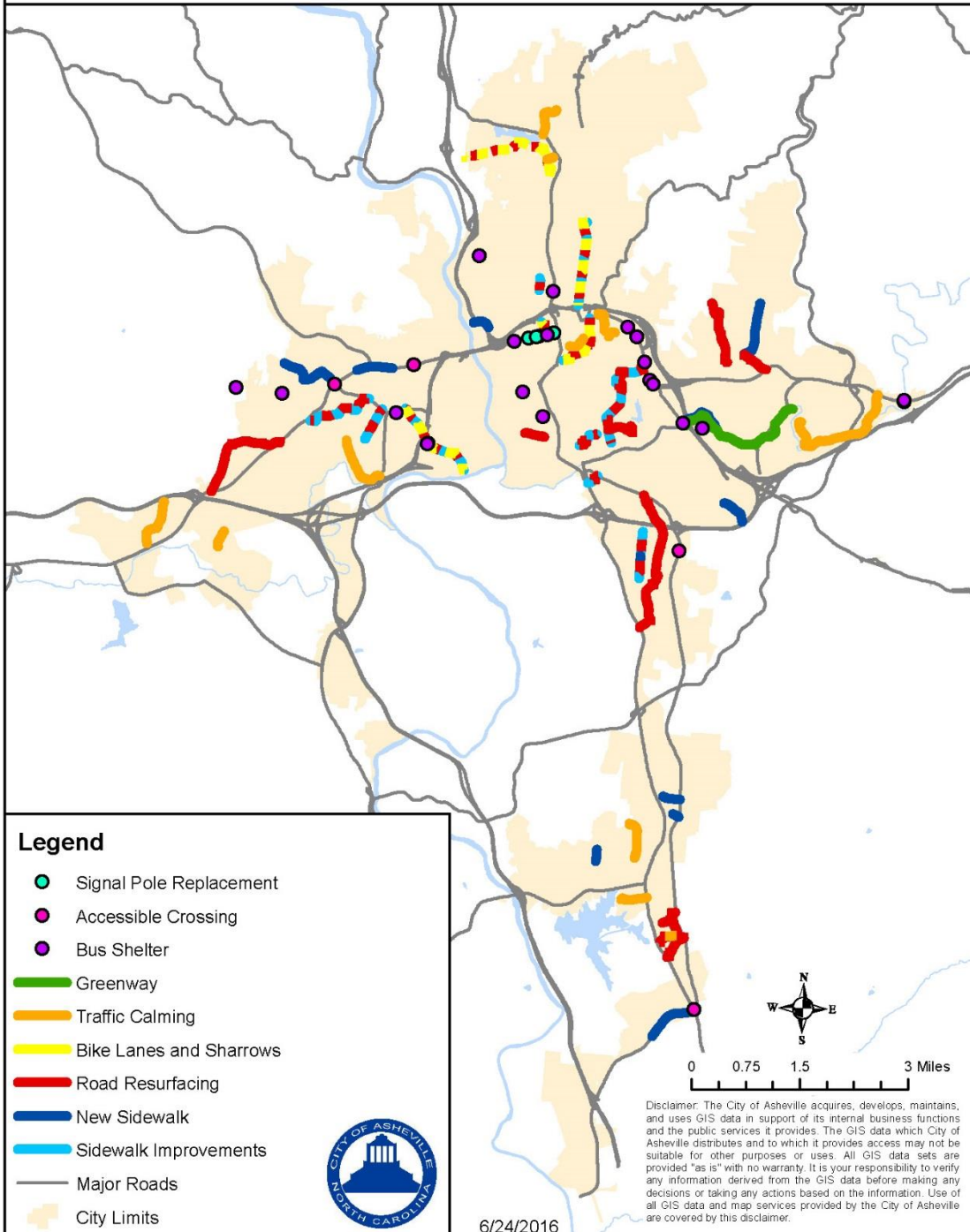


Infrastructure Category Overview	
Funding Recommendation: 30 Million	
<p>Option Justification:</p> <p>The City's infrastructure plays a vital role in connecting people to places safely for work and play. Improved transit, bikeways, greenways and mobility have been identified as priorities for our city by the Asheville in Motion mobility plan, the Transit Master Plan, the Greenway Master Plan, City Council's 3036 Vision and the citizen of Asheville.</p>	
<p>Recommended Projects:</p> <ul style="list-style-type: none"> • Streets and Bikeway improvements • Sidewalk Maintenance • New Sidewalk • Transportation Safety • Greenway 	

Infrastructure Bond Projects	
Infrastructure Category	Estimated Cost
Road Resurfacing	\$ 16,277,281
Sidewalk Improvements	\$ 3,535,000
New Sidewalk Projects	\$ 6,320,000
Transportation Safety	\$ 1,900,000
Greenways	\$ 4,600,000
	\$ 32,632,281

Proposed Infrastructure Bond Projects

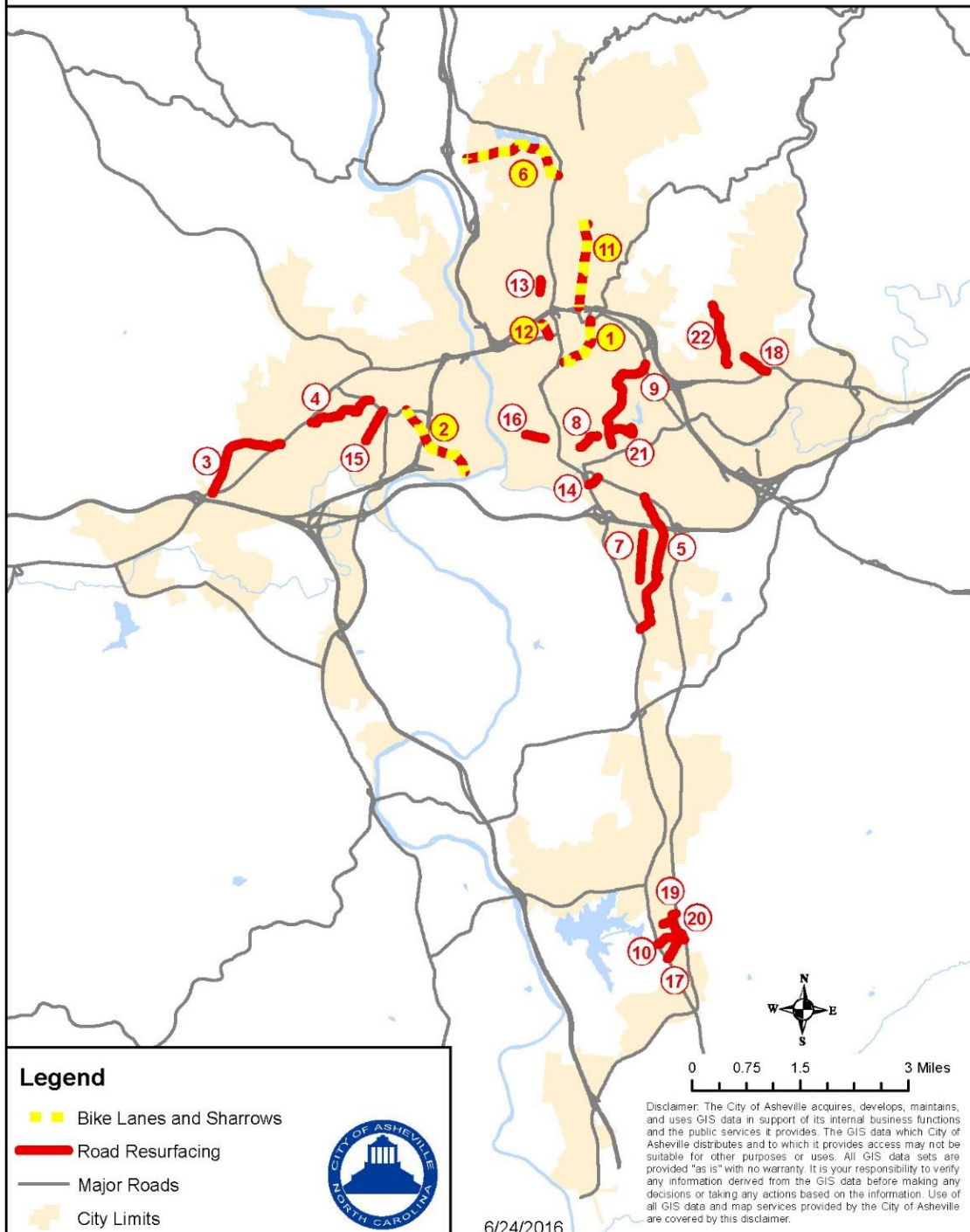


<p style="text-align: center;">Project Detail</p> <p style="text-align: center;">Infrastructure - Streets and Bikeway Improvements</p>
<p style="text-align: center;">Funding Recommendation:</p> <p style="text-align: center;">\$15,500,000</p>
<p style="text-align: center;">Project Justification:</p> <p>The City of Asheville has an aging streets infrastructure. 81% of the respondents to the 2015 Citizen Survey rated improving roads as essential or very important. The current level of funding is not adequate to maintain the existing aged infrastructure in the City of Asheville. Funding the recommended large projects through this bond package would allow other funding for smaller projects; therefore improving street conditions throughout Asheville.</p>
<p style="text-align: center;">Proposed Investment:</p> <p>The rehabilitation and or reconstruction of severely aged roadways through patching and resurfacing. (see list of recommended projects below)</p>
<p style="text-align: center;">Investments made in the last 5 years:</p> <p>The amount appropriated by Council for street resurfacing, rebuilding, and major repair for the five prior fiscal years is as follows:</p> <p style="margin-left: 40px;">FY11/12 - \$1,313,274</p> <p style="margin-left: 40px;">FY12/13 - \$1,323,693</p> <p style="margin-left: 40px;">FY13/14 - \$1,984,193</p> <p style="margin-left: 40px;">FY14/15 - \$1,984,193</p> <p style="margin-left: 40px;">FY15/16 - \$2,000,000</p>
<p style="text-align: center;">Ways this project fulfills a Master Plan or addresses a current need</p> <p>This work will help create a more reliable infrastructure and allow for reliable mobility of the citizens through various modes of transportation throughout the city.</p>
<p style="text-align: center;">Community impacts and project benefits</p> <ul style="list-style-type: none"> • 16 miles of resurfaced roads • Addition of bikeway improvements during resurfacing projects • Improved safety on roadways

<p>Impact to current work plans and project schedules:</p> <p>With current annual funding it will take approximately 6.5 years to compete this amount of road resurfacing. The additional bond funding will move the recommended projects forward, along with accomplishing projects with current \$2.5 Million of annual funding.</p>
<p>Ongoing operations and maintenance costs after project completion</p> <p>Standing Annual resurfacing funds.</p>
<p>Alternative funding sources outside of General Obligation bonds</p> <p>Standing Annual resurfacing funds.</p>

Road Resurfacing *with bike lanes and sharrows			
Priority	Name	Cost	Area
1	Martin Luther King Jr Dr *	\$ 2,877,855	Central
2	State St *	\$ 1,201,468	West
3	Old Haywood Rd	\$ 924,238	West
4	Sulphur Springs Rd	\$ 809,212	West
5	Caribou Rd	\$ 1,539,778	South
6	Lakeshore Dr *	\$ 1,335,260	North
7	Brooklyn Rd	\$ 1,322,987	South
8	Caledonia Rd	\$ 694,542	East
9	Kenilworth Rd	\$ 1,746,204	East
10	Royal Pines Dr	\$ 207,304	South
11	Charlotte St	\$ 1,163,256	North
12	Haywood St *	\$ 381,711	Central
13	Fulton St	\$ 5,720	North
14	All Souls Cres	\$ 5,720	South
15	Vermont Ave	\$ 48,477	West
16	Oakland Rd	\$ 263,334	Central
17	Sycamore Dr	\$ 256,098	South
18	Beverly Rd	\$ 354,503	East
19	Birch Ln	\$ 169,432	South
20	Cherry St	\$ 149,056	South
21	Chiles Ave	\$ 335,542	East
22	Cisco Rd	\$ 485,585	East
		\$ 16,277,281	

Proposed Road Resurfacing and Bicycle Improvements

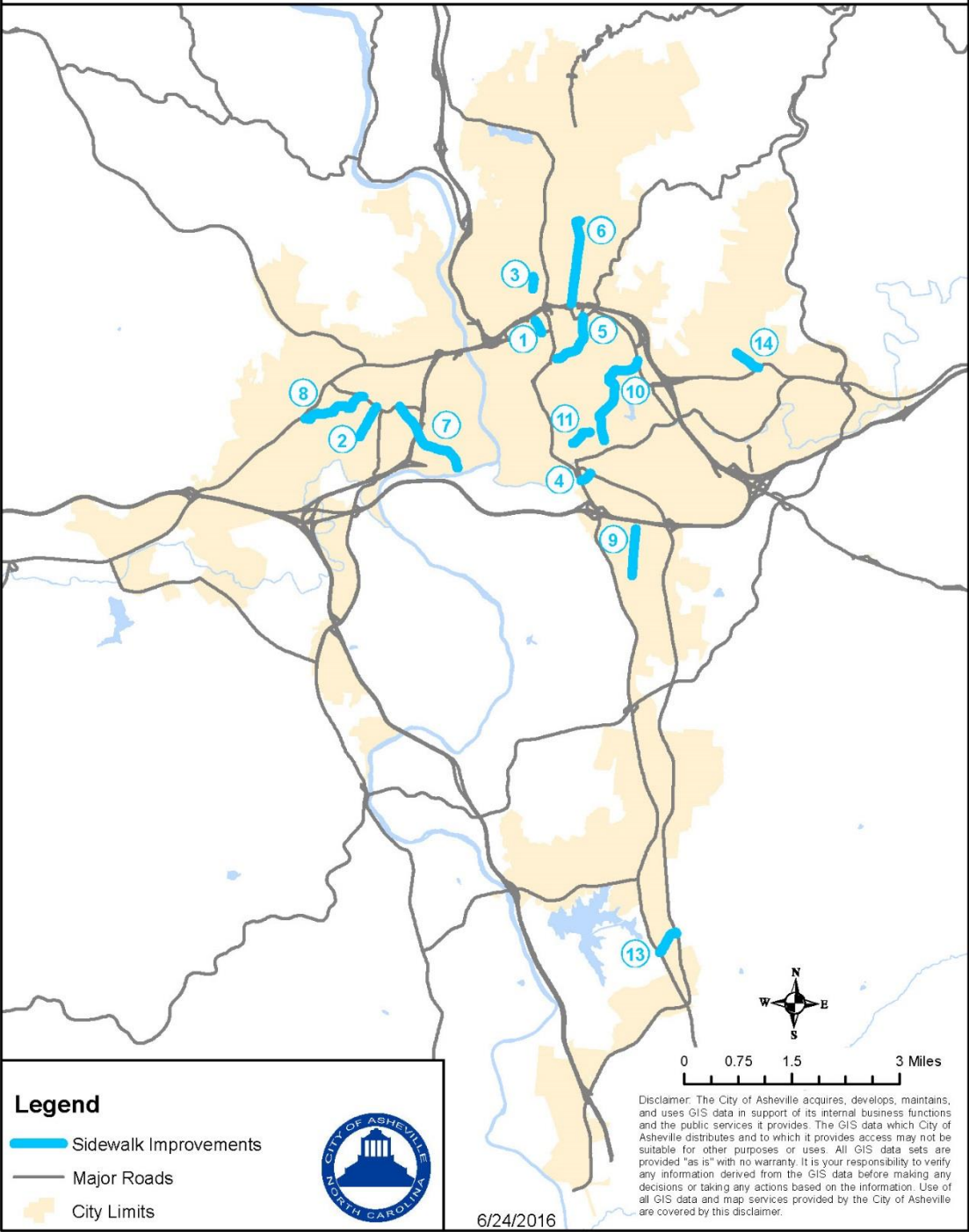


<p style="text-align: center;">Project Detail Infrastructure - Sidewalk Maintenance</p>
<p style="text-align: center;">Funding Recommendation: \$3,500,000</p>
<p style="text-align: center;">Project Justification:</p> <p>A goal of the Asheville Pedestrian Plan is to enhance the pedestrian environment and increase opportunities to choose walking as a mode of transportation to help improve the health of the citizens of Asheville. In the 2015 Citizen survey 84% of the respondents rated sidewalks, bikeways and greenways as essential or very important. Continued Sidewalk maintenance will improve pedestrian safety throughout the city.</p>
<p style="text-align: center;">Proposed Investment:</p> <ul style="list-style-type: none"> • 8 miles of sidewalk maintenance throughout the City of Asheville (see list below of recommended sidewalk maintenance projects) • ADA compliance on rehabbed sidewalks
<p style="text-align: center;">Investments made in the last 5 years:</p> <p>The amount appropriated by Council for sidewalk constructions and major repair for the five prior fiscal years is as follows:</p> <p style="padding-left: 40px;">FY11/12 - \$2,116,225 FY12/13 - \$1,351,449 FY13/14 - \$4,591,225 (including \$4,125,000 for multi-year Hendersonville Rd. sidewalk construction) FY14/15 - \$350,000 FY15/16 - \$718,000</p>
<p style="text-align: center;">Ways this project fulfills a Master Plan or addresses a current need</p> <p>There is a large backlog of outstanding work orders for sidewalk maintenance across the city. The sections of sidewalks contained within this project are areas of sidewalk that have high priority needs. Sidewalk rehabilitation addresses the need for the city to be more walkable. Maintenance on the recommended sidewalks will make the areas more accessible for pedestrians of all abilities. In addition these improvements will reduce the City's exposure to liability.</p>
<p style="text-align: center;">Community impacts and project benefits</p> <ul style="list-style-type: none"> • 8 miles of improvements to existing sidewalks throughout the city

<p align="center">Impact to current work plans and project schedules:</p> <p>Many of these sidewalk rehabs will occur concurrently with resurfacing projects. With current annual funding it will take approximately 13.3 years to complete this amount of road resurfacing. The additional bond funding will move the recommended projects forward, along with accomplishing projects with current \$250,000 of annual funding.</p>
<p align="center">Ongoing operations and maintenance costs after project completion</p> <p>Standing annual funds.</p>
<p align="center">Alternative funding sources outside of General Obligation bonds</p> <p>Many of these sidewalk rehabs will occur concurrently with resurfacing projects. These projects will be developed by current PW and CPMD staff and administered by staff or contract inspection.</p>

Sidewalk Improvements			
Priority	Name	Estimated Cost	Area
1	Haywood St	\$ 415,000	Central
2	Vermont Ave	\$ 598,000	West
3	Fulton St	\$ 212,000	North
4	All Souls Cres	\$ 702,000	South
5	Martin Luther King Jr Dr	\$ 325,000	Central
6	Charlotte St	\$ 260,000	North
7	State St	\$ 260,000	West
8	Sulphur Springs Rd	\$ 260,000	West
9	Brooklyn Rd	\$ 98,000	South
10	Kenilworth Rd	\$ 260,000	East
11	Caledonia Rd	\$ 41,000	East
12	Oakland Rd	\$ 26,000	Central
13	Sycamore Dr	\$ 13,000	South
14	Beverly Rd	\$ 65,000	East
		\$ 3,535,000	

Proposed Sidewalk Improvements

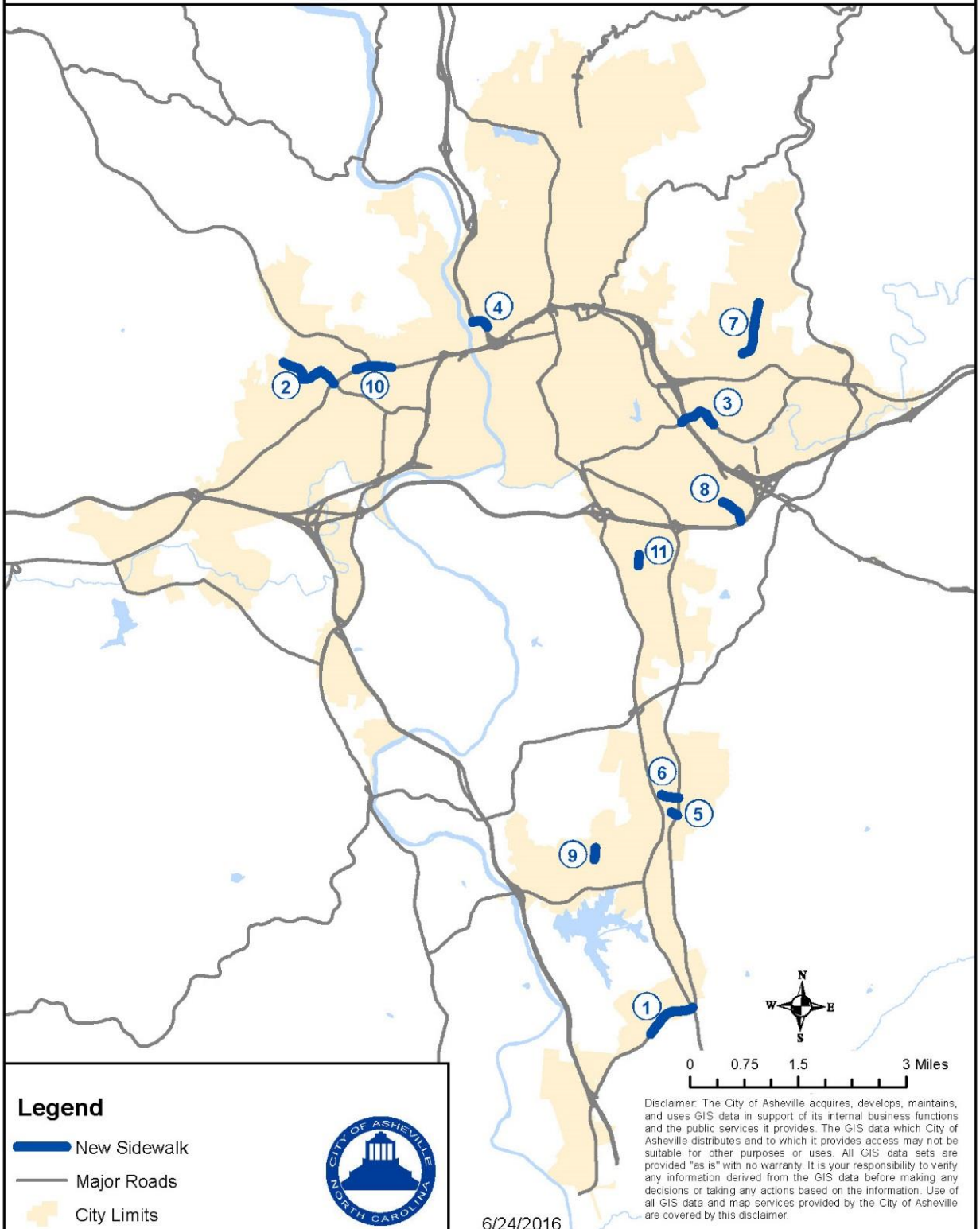


<p style="text-align: center;">Project Detail Infrastructure - New Sidewalks</p>
<p style="text-align: center;">Funding Recommendation: \$6,300,000</p>
<p style="text-align: center;">Project Justification:</p> <p>There are over 100 miles of needed sidewalk linkages in Asheville as identified in the 2004 Pedestrian Thoroughfare Plan. Funding allows for an average of 2 miles of new sidewalks per year, based on current funding leveraged with grants. The development of new sidewalks addresses pedestrian safety priorities identified in the Asheville in Motion plan and the Asheville Pedestrian Plan. In the 2015 Citizen survey 84% of the respondents rated sidewalks, bikeways and greenways as essential or very important. Needed linkages will connect people to work, school, public transportation, recreation and other amenities throughout the community.</p>
<p style="text-align: center;">Proposed Investment:</p> <ul style="list-style-type: none"> • Provide 12 New Sidewalks Linkages listed as a priority throughout the city (see table for recommended list of new sidewalks below)
<p style="text-align: center;">Investments made in the last 5 years:</p> <p>Sidewalk construction:</p> <p>FY11/12 - \$2,116,225</p> <p>FY12/13 - \$1,351,449</p> <p>FY13/14 - \$4,591,225 (including \$4,125,000 for multi-year Hendersonville Rd. sidewalk construction)</p> <p>FY14/15 - \$350,000</p> <p>FY15/16 - \$718,000</p>
<p style="text-align: center;">Ways this project fulfills a Master Plan or addresses a current need</p> <p>All sidewalks address pedestrian and safety priorities identified in the AIM plan and aid connections to transit as called for in the Transit Master Plan. All but two new sidewalks are needed linkages in the pedestrian plan, and the two exceptions, Airport Road and Hill Street, provide connections to jobs on what are very difficult connections for walking.</p>
<p style="text-align: center;">Community impacts and project benefits</p> <ul style="list-style-type: none"> • 4 miles of new sidewalks • Safe routes to schools, transit, work, recreation and the community. • Multi Modal transportation options

<p style="text-align: center;">Impact to current work plans and project schedules:</p> <p>This would be a major project that will require all phases of sidewalk development. Even if all work is contracted out, the Capital Projects Division will need to devote project management staff time.</p>
<p style="text-align: center;">Ongoing operations and maintenance costs after project completion</p> <p>Standing annual funding</p>
<p style="text-align: center;">Alternative funding sources outside of General Obligation bonds</p> <ul style="list-style-type: none"> • CIP funding after 2025, possible MPO grants

New Sidewalk Projects				
Priority	Name	Estimated Cost	Area	Connections
1	Airport Rd	\$ 510,000	South	City: Walmart to H'ville Rd; NCDOT: remainder
2	Johnston Blvd	\$ 1,372,000	West	Connects school, ball fields, low income comm to jobs/services/transit on Patton.
3	Swannanoa River Rd	\$ 756,000	East	Connects S. Tunnel to Bleachery; Transit, grocery, shopping, jobs
4	Hill St	\$ 468,000	North	Hillcrest to RADTIP; provides access to riverfront recreation, jobs, experiences.
5	Mills Gap Rd	\$ 128,000	South	Short Linkage needed to connect Sweeten Creek to H'ville Rd.
6	Gerber Rd	\$ 357,000	South	Short Linkage needed to connect Sweeten Creek to H'ville Rd.
7	New Haw Creek Rd	\$ 1,120,000	East	Extends existing to Bell Rd; access from houses to two schools
8	Onteora Blvd	\$ 588,000	East	Completes needed linkage; connects to schools, Fairview Rd
9	Overlook Rd	\$ 213,000	South	Short Linkage to connect subdivision to existing sidewalk, access to 3 schools
10	Brooklyn Rd	\$ 192,000	South	Links to newer sidewalk on Shiloh Rd and Recreation Center
11	Patton Ave (gaps)	\$ 616,000	West	Fill gaps on south side of Patton Ave to avoid crossing New Leicester Hwy
		\$ 6,320,000		

Proposed New Sidewalks



<p style="text-align: center;">Project Detail</p> <p style="text-align: center;">Infrastructure – Transportation Safety</p>
<p style="text-align: center;">Funding Recommendation:</p> <p style="text-align: center;">Pedestrian Safety and Traffic Calming : \$1,400,000 Transit Improvements : \$500,000</p>
<p style="text-align: center;">Project Justification:</p> <p>Asheville has been ranked first in North Carolina for pedestrian-involved crashes per capita for several years. Transit and pedestrian improvements will address safety and quality of life concerns for residential neighborhoods and busy Asheville corridors. The Asheville in Motion mobility plan listed pedestrian priority signalization at downtown intersections and increased safety for all protected pedestrian routes, bike routes, and transit routes as priorities.</p> <p>The 2013 ART Survey shows that 63% of riders use the bus because it is their only option, and 65% of riders said adding more shelters was ‘very important.’ Additionally, bus shelters provide a safe and ADA accessible way to board and alight from buses, which is an issue of growing importance considering 33% of riders identified as being disabled, and 37% of riders are over the age of 50.</p>
<p style="text-align: center;">Proposed Investment:</p> <ul style="list-style-type: none"> • Replace damaged traffic signal poles • Pedestrian WALK/DON’T WALK signal heads and ADA accessible pushbuttons for four intersections under the jurisdiction of NCDOT in Asheville. • Speed humps on ten streets totaling 8.24 miles in length in different geographical areas in Asheville • New ADA accessible bus shelters
<p style="text-align: center;">Investments made in the last 5 years:</p> <ul style="list-style-type: none"> • Signal Pole Replacements: \$86,000 • Accessible Pedestrian Upgrades: \$45,000
<p style="text-align: center;">Ways this project fulfills a Master Plan or addresses a current need</p> <p>Improved pedestrian safety is a priority in the Asheville In Motion mobility plan, the Transit Master Plan, the complete streets policy and the Pedestrian Plan. These projects will address ADA accessibility to provide equal access to all users. These updates will assist in maintaining compliance with Federal Government mandates.</p> <p>Construction of new bus shelters with modern specifications will improve service for captive riders while at the same time, helping to market to choice riders and tourists, all of which are listed as major goals in the Transit Master Plan. The added comfort, safety, and convenience of new shelters will improve service for current riders and will make the system more attractive to potential riders.</p>

Community impacts and project benefits

- This project would reduce potential liability from signal poles that are rusted or damaged by vehicles.
- Provide access to signals for persons with disabilities and for transit riders.
- The 2009 Transit Master Plan reported 87 unique stop locations that had 10 or more daily boardings, and 23 unique stop locations that have 25 or more daily boardings. New shelter construction at top locations, could impact a minimum of 149,500 workday trips per year (260 days x 23 stops x 25 boardings). Actual numbers are likely to significantly exceed this estimate.
- Additional bus shelters enhance services for members of the community that depend on public transit as their only mode of transportation, which gives them better access to public services and employment centers.

Impact to current work plans and project schedules:

Additional funding would allow staff to advance work on a larger number of shelters in one process, rather than a piecemeal approach, which would reduce administrative costs, increasing the overall efficiency and effectiveness of the program. Additionally, focusing new construction on higher volume locations known to be noncompliant with ADA regulations could have secondary benefits related to funding, by reducing the risk of accidents and disability access complaints which would over time lead to reduced legal and administrative costs.

Ongoing operations and maintenance costs after project completion

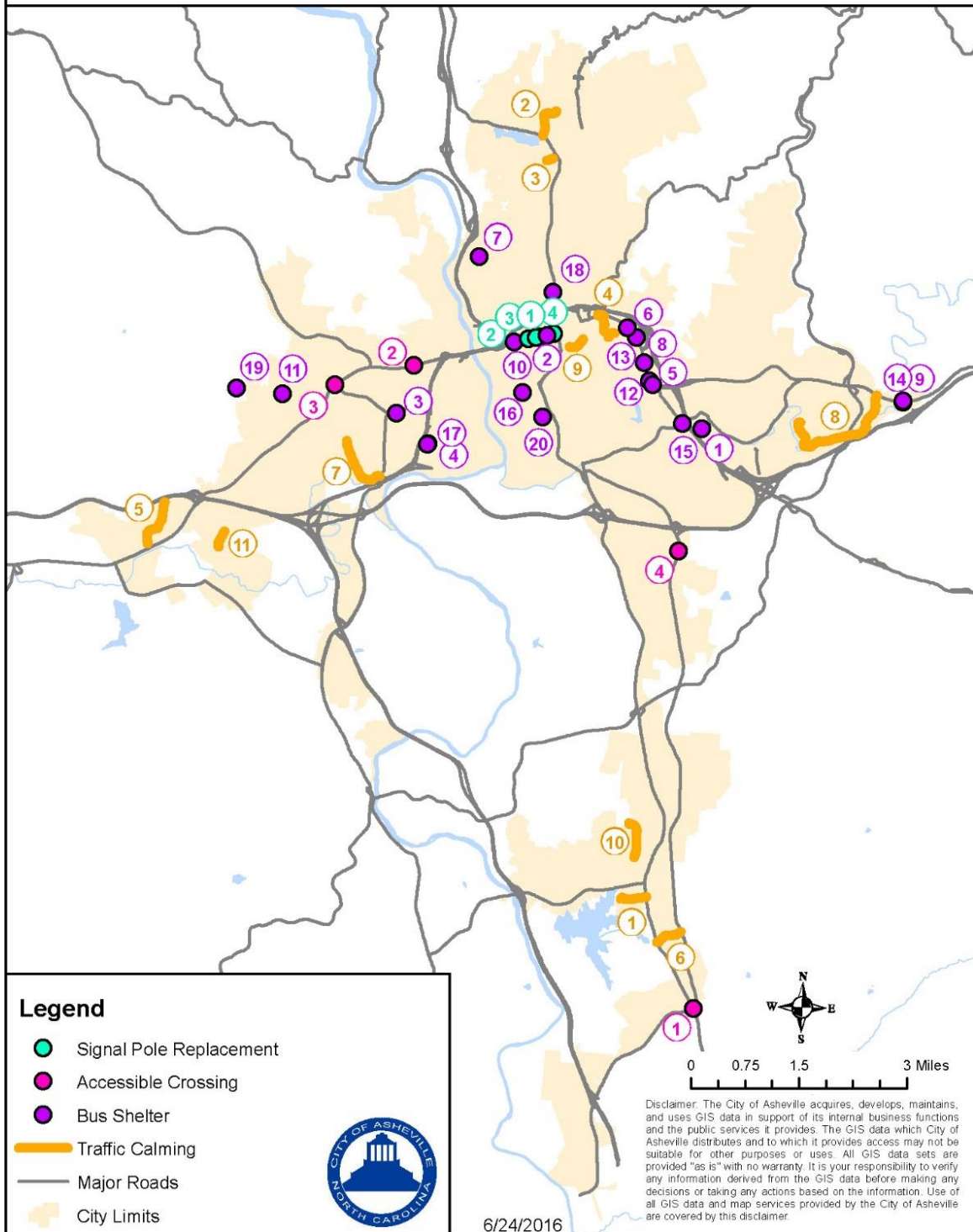
Alternative funding sources outside of General Obligation bonds

- The alternative funding source for these projects would be the CIP.
- FTA funding has been used in the past for bus shelter construction, but this is significantly less than what is needed and increases administrative costs by pursuing a piecemeal approach. Therefore, there has been no new shelter construction in the last 3 years.

Transportation Safety			
Priority	Name	Estimated Cost	Area
Bus Shelters			
1	Bleachery at Walmart		East
2	Patton Ave at Haywood St		East
3	Haywood Rd at Virginia Ave		West
4	Hanover St at State St		West
5	Tunnel Rd at Buckstone Pl		East
6	Tunnel Rd at Chunns Cove Rd		East
7	Klondyke Pl at Klondyke		North
8	Tunnel Rd at Kenilworth Rd		East
9	US 70 East at ABCCM		East
10	Patton Ave at Clingman Ave		Central
11	Deaverview Rd at Deaverview		West
12	Tunnel Rd at White Pine Dr		East
13	Tunnel Rd at Ingles		East
14	US 70 West at ABCCM		East
15	S Tunnel Rd at Swannanoa River Rd		East
16	S French Broad Ave at Bartlett St		Central
17	Hanover St at State St		West
18	Merrimon Ave at E Chestnut St		North
19	Pisgah View Rd at Canteberi Pl		West
20	Livingston St at Pine Grove Ave		Central
		\$ 500,000	
Pedestrian Safety: Signal Pole Replacements			
1	Patton Ave at Asheland Ave		Central
2	Patton Ave at N/S French Broad Ave		Central
3	Patton Ave at Otis St		Central
4	Patton Ave at Lexington Ave		Central
		\$ 750,000	
Pedestrian Safety: Accessible Crossings			
1	Airport Rd at Hendersonville Rd		South
2	Patton Ave at Florida Ave		West
3	Patton Ave at Haywood Rd		West
4	Sweeten Creek Rd at Medical Park Dr		South
		\$ 250,000	

Traffic Calming Sites			
1	Atkins St - 5		South
2	Wembley Rd - 9		North
3	Osborne Rd - 2		North
4	College St - 8		Central
5	Moody Ave - 13		West
6	Royal Pines Dr - 6		South
7	Shelburne Rd - 13		West
8	Azalea Rd E - 30		East
9	Max St - 5		Central
10	Westridge Dr - 10		South
11	Gudger Rd - 5		West
		\$ 400,000	
All Pedestrian Safety and Transit		\$ 1,900,000	

Proposed Pedestrian Safety and Transit Improvements



<div>Project Detail: Infrastructure: Greenways</div>
<div>Funding Recommendation: \$4,600,000</div>
<div>Project Justification: Greenways connect people to the places they live, work and play as well as preserve open space to promote air and water quality. The proposed greenway is identified as a priority by the Greenway Master Plan, the Greenway Committee of the Multi Modal Transportation Commission, and the Asheville In Motion mobility plan. There are 7 miles of greenways funded for construction in the next 3 years. The City’s vision of a 15 mile interconnected system could provide healthier and safer options for citizens to travel. Several multiple smaller scale projects are also needed to further implement the Greenway Master Plan.</div>
<div>Proposed Investment: Design, permit and construct the first phase of the Swannanoa River Greenway, a two-mile section from South Tunnel Road to Azalea Park. When completed, the Swannanoa River greenway will be 7.75 miles and provide the major east-west greenway connection between the French Broad River greenways’ convergence at Amboy Road to the eastern city limits in Oteen. Smaller links, connections and extensions will provide opportunity for collaboration between Buncombe County and/or private fundraising.</div>
<div>Investments made in the last 5 years: Completed Greenways 2010 \$928,210 2011 \$1,021,121 Scheduled Greenway Construction FY 16 \$2,350,000 FY 17 \$10,650,000</div>
<div>Ways this project fulfills a Master Plan or addresses a current need The Swannanoa River Greenway is a project in the Greenway Master Plan, a priority of the Greenway Committee of the Multimodal Transportation Commission, and is identified as a priority greenway in the Asheville in Motion mobility plan. Connectors, links and extensions provide an opportunity for expanded partnerships with the county in regional planning efforts.</div>
<div>Community impacts and project benefits Additions to the system will connect people to work, shopping and jobs, and offer free active recreation and social interaction. It will be available to surrounding neighborhoods, to users of Azalea Park and the adjoining soccer fields, as well as people who can access it from the Walmart on Bleachery Blvd.</div>

<p align="center">Impact to current work plans and project schedules:</p> <p>Not currently scheduled.</p>
<p align="center">Ongoing operations and maintenance costs after project completion</p>
<p align="center">Alternative funding sources outside of General Obligation bonds</p> <p>CIP and other grant funding for which the project may qualify.</p>

Greenways		
Name	Cost	Area
Swannanoa River Greenway	\$ 3,600,000	East
Connectors, Linkages, and Extensions	\$ 1,000,000	TBD
	\$ 4,600,000	

Proposed Greenway

